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Engineers Without Borders - Ireland

Darren Mollaghan
Co-President

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Outline



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- Engineering for Development
- EWB and EWB-Ireland
- EWB-Ireland Programme Areas
- Getting Involved




Sustainable Development....and Engineering

Sustainable Development



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“meeting the needs of the present without
compromising the ability of future
generations to meet their own needs”

Brundtland Commission 1987

Needs of the present



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1.1 billion people lack access to safe drinking water

2.9 billion lack access to basic sanitation

1.6 billion people live off grid

Of the 1.9 billion children in the developing world:

1 in **3** are without adequate shelter

1 in **5** have no access to safe water

1 in **7** have no access to health services

Engineer's Role in Sustainable Development



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Engineers can make a huge difference in developing countries

- Water & Sanitation
- Energy
- Habitat
- Industry
- IT
- Transport

Needs of the present



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For every 100,000 people:

Africa: <1 engineer

Europe: 500+ engineers



Engineers Without Borders

Engineers Without Borders



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- First group formed in France in the 1980s
Ingénieurs sans frontières (ISF) - France

- EWB/ISF idea spread globally:

UK
France
Spain
Italy
Germany
Australia

USA
Canada
Bolivia
New Zealand
Korea
Colombia

India
Denmark
Mexico
Portugal
Uganda
Chile

... Plus Many More

Engineers Without Borders



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- Majority of national groups developed independently
 - no formal affiliation between most
- Informal relationships exist between many national groups



- Officially formed 2010
- National Committee consisting of 7 engineers and scientists

Multi-discipline:

Civil

Mechanical

Electrical

Environmental

Energy

- Representatives in Dublin, Cork & Belfast

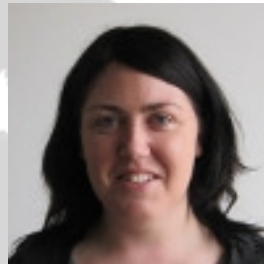
EWB-Ireland



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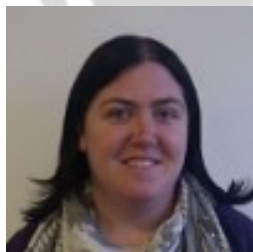
Secretary
Lorraine Gaston



Co-President
Lourda Casserly



Co-President
Darren Mollaghan



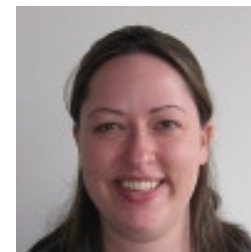
Research / Outreach
Edel Casserly



IT
Caoilte Guiry



Branch Co-ordinator
Leila Muchanga



PR
Siobhan McGrath

Aims



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- **Promote awareness of issues** surrounding sustainable development and the role technology can play in reducing poverty and creating sustainable communities
- **Facilitate research** into engineering solutions for sustainable development in developing countries
- **Facilitate engineering projects** in developing communities to assist sustainable development and relief of poverty
- **Provide a network** for engineers & scientists interested in development

EWB-UK Memorandum of Understanding



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- EWB-UK to share advice/materials to **support growth** of EWB-Ireland
 - Org Development / Fundraising Policies/Procedures etc
- EWB-UK to **open its Placement programme** to EWB-Ireland members
- **Collaboration in Research** programmes

Programme Areas



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Training

Research

Placements

Outreach

Branches

Training



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Workshops

Evening Lectures

Provide **development education** for members, with a focus on the role of technology & engineering

Assist future potential development workers to **develop skills** for working in the developing world

Research



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Facilitate **undergraduate & post-graduate technical research** in development-based topics

Create a **network for researchers** involved in development-based research

Research



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2010/2011:

Lydia Cumisky & Ronan Farrell (UCD)

Optimising properties of grass fibrous by-product material as mud-brick reinforcement



2011/2012:

Grant Deeney & Shane McHale (NUIG)

Analysis of a Reciprocal Roof Frame Shelter for use in Humanitarian Emergencies



NUI Galway
OÉ Gaillimh

Placements



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- Aim to give Irish students & engineers an opportunity to use their skills in technical projects to assist developing communities
 - Through partnerships with NGOs
- MoU created provision for EWB-Ireland members to apply to UK's placement scheme
- Number of EWB-Ireland members applied for EWB-UK placements for the first time this year

Outreach



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Interactive Workshops aimed at creating awareness amongst young people on global development issues

Focus on Primary/ Second level students

EWB event as part of Engineers Week
“Water for the World”



Branches



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- Create network of regional branches throughout Ireland
Student Societies / Professional Networks
- Enables greater interaction between members
- Branches can organise events for their area
Talks, Outreach, Branch Projects



Queen's University
Belfast



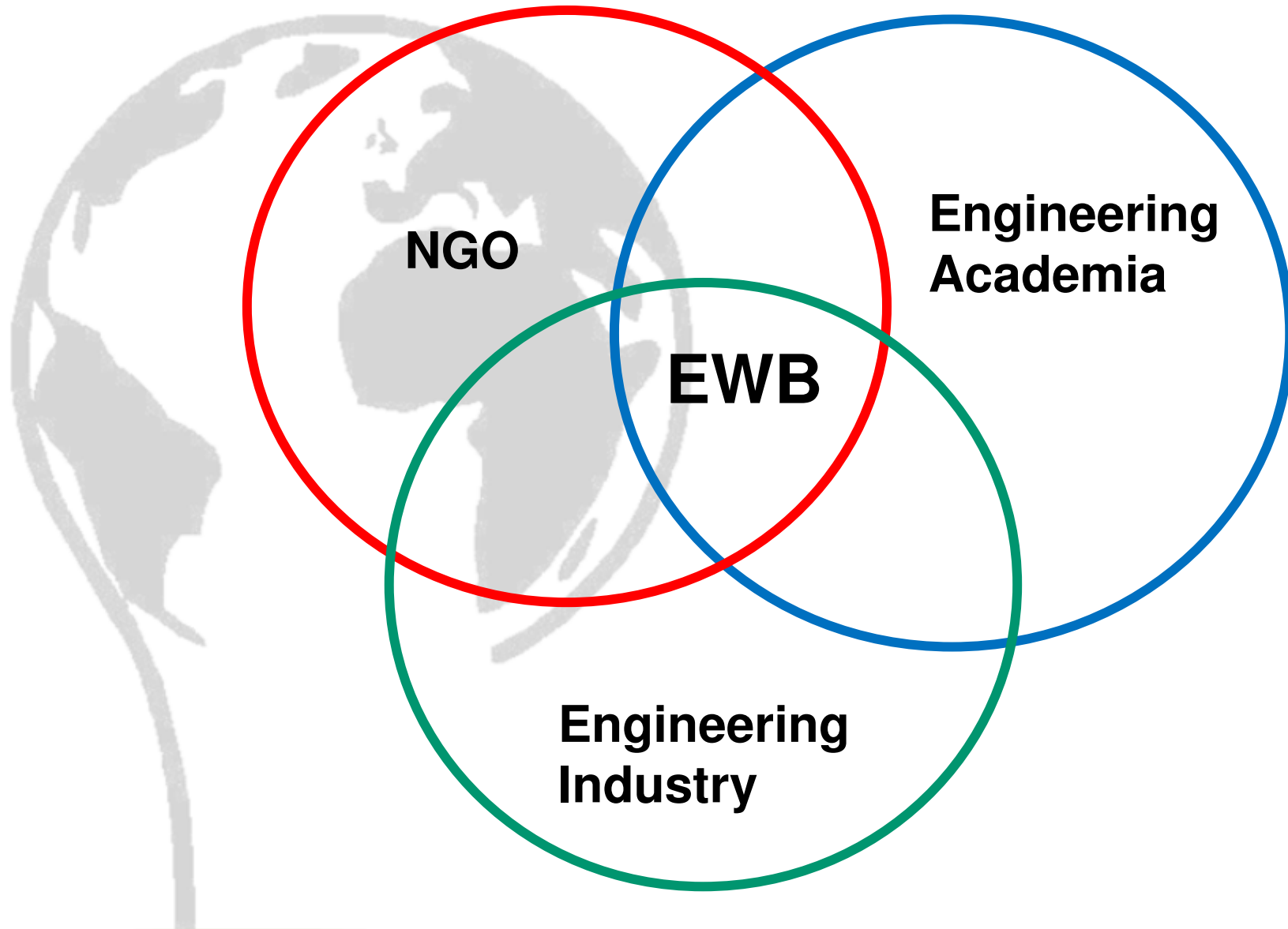
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Get Involved!



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NGO

**Engineering
Academia**

EWB

**Engineering
Industry**



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Thank You!

Questions?